

# **Colorado Potato Cultivar Specific Management**

## **Data Summary - 2**

### **2005**

**Samuel Y.C. Essah, Research Scientist**

**Colorado State University  
San Luis Valley Research Center  
Center, Colorado**

# TABLE OF CONTENTS

	Page
<b>INTRODUCTION</b> .....	2
<b>RESULTS (Data tables):</b>	
<b>RUSSETS</b>	
Rio Grand Russet (AC89536-5RU) .....	3-4
Nitrogen application timing for Rio Grand Russet .....	3
Plant population management for Rio Grand Russet .....	3-4
Vine kill management for Rio Grand Russet .....	4
CO94035-15RU	
Plant population management of CO94035-15RU .....	5
Vine kill management for CO94035-15RU .....	5-6
AC92009-4RU	
Influence of seed size and seed age on the performance of AC92009-4RU .....	6
CO93001-11RU	
Plant population management of CO93001-11RU .....	7
Vine kill management for CO93001-11RU .....	7-8
Klamath Russet	
Vine kill management for Klamath Russet .....	8
Russet Norkotah (Selection 8)	
Plant population management for Russet Norkotah (Sel. 8) .....	9
Vine kill management for Russet Norkotah (Sel. 8) .....	9-10
<b>RED SKINNED/WHITE FLESH</b>	
Colorado Rose (CO89097-2R)	
Nitrogen application timing for Colorado Rose .....	11-12
Plant population management for Colorado Rose .....	12-13
Vine kill management for Colorado Rose .....	13-14
Durango Red (CO86218-2R)	
Plant population management of Durango Red .....	15
Vine kill management of Durango Red .....	16
NDC5281-2R	
Nitrogen application rate and in-row seed spacing management of NDC5281-2R .....	17-22
Sangre	
Nitrogen application rate and in-row seed spacing management of Sangre .....	23-28

## SPECIALTY POTATOES

Page

Purple Majesty (CO94165-3P/P)

Nitrogen application rate and in-row seed spacing management of Purple Majesty –29-32

Mountain Rose (CO94183-1R/R)

Nitrogen application rate and in-row seed spacing management of Mountain Rose –33-38

All Blue

Nitrogen application rate and in-row seed spacing management of All Blue ----- 39-42

VC0967-2R/Y

Plant population management of VC0967-2R/Y ----- 43

Vine kill management of VC0967-2R/Y ----- 44-45

VC1002-3W/Y

Plant population management of VC1002-3W/Y ----- 45

Vine kill management of VC1002-3W/Y ----- 46

## INTRODUCTION

Each potato cultivar, or advanced selection, has its own unique set of cultural requirements. Therefore, cultural practices that maximize production of newly introduced cultivars must be identified. Cultivars do not necessarily require the same cultural practices to maximize yield of premium size and grade tubers. The best guidelines for fertility practices, plant population management, or vine kill management are obtained from field experiments conducted in the specific production area. New cultivars are much more successful when release is accompanied by cultivar specific management guidelines. This information relates growth habit and other characteristics to nutrient management strategies for yield goals, which are environmentally and economically responsible, optimal planting rates relative to yield goals, grade desired and final end use, herbicide tolerance, vine kill, seed size, irrigation requirements, and seed preparation (e.g. pre-cut vs. whole seed, green sprouting or warm seed vs. fresh seed). When management guidelines are tailored for individual clones it leads to the successful, sustainable and economic production of advanced clonal selections and newly released cultivars, which optimize their genetic potential, while minimizing economic inputs and environmental impacts.

Table 1. Effect of nitrogen application timing on yield and tuber size profile of Rio Grand Russet (AC89536-5RU) – 2005

Application timing <sup>1</sup>	Total	< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz	> 16 oz
Jun 16 - Jul 28	572	88	487	472	364	108	42	16
Jun 23 - Aug 4	597	96	495	484	365	119	64	11
Jun 30 – Aug 11	653	100	519	508	428	81	8	10

A total of 140 lb N/ac was applied in four split applications. Sixty lb N/ac was applied pre-plant. The June 16, 23, and 30 applications were done 5, 6, and 7 wk after planting, respectively, and subsequent split applications were done at two weeks interval until the total rate of 140 lb N/ac was attained.

Table 2. Effect of nitrogen application timing on tuber quality of Rio Grand Russet (AC89536-5RU) – 2005

Application timing <sup>1</sup>	% External defects <sup>2</sup>	% Internal defects <sup>3</sup>	Specific Gravity
Jun 16 - Jul 28	1.1	0	1.091
Jun 23 - Aug 4	1.0	0	1.089
Jun 30 – Aug 11	1.6	0	1.090

<sup>1</sup> A total of 140 lb N/ac was applied in four split applications. Sixty lb N/ac was applied pre-plant. The June 16, 23, and 30 applications were done 5, 6, and 7 wk after planting, respectively, and subsequent split applications were done at two weeks interval until the total rate of 140 lb N/ac was attained.

<sup>2</sup> Includes growth cracks, knobs, and misshapes

<sup>3</sup> Includes hollow heart and brown center

Table 3. Effect of in-row seed spacing on yield and tuber size profile of Rio Grand Russet (AC89536-5RU) – 2005

Seed Spacing (inches)	Total	< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz	> 16 oz
10	600	147	453	447	373	74	34	6
12	593	99	494	484	376	108	49	10
14	588	113	476	476	411	65	18	0

Table 4. Effect of in-row seed spacing on tuber quality of Rio Grand Russet (AC89536-5RU) – 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	0.8	0	1.093
12	0.2	2.4	1.093
14	0.3	1.2	1.097

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center

Table 5. Effect of vine kill date on yield and tuber size profile of Rio Grand Russet (AC89536-5RU) – 2005

Vine kill (DAP) <sup>1</sup>	Yield (cwt/ac)							
	Total	< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz	> 16 oz
90	395	161	233	233	231	3	0	0
100	543	146	397	397	369	28	8	0
110	710	164	541	525	430	95	46	15
120	630	123	507	505	413	92	28	3

<sup>1</sup>Days after planting

Table 6. Effect of vine kill date on tuber quality of Rio Grand Russet (AC89536-5RU) – 2005

Vine kill (DAP) <sup>1</sup>	% External defects <sup>2</sup>	% Internal defects <sup>3</sup>	Specific Gravity
90	0.0	0	1.066
100	1.9	0	1.075
110	1.1	0	1.085
120	0	0	1.093

<sup>1</sup>Days after planting;

<sup>2</sup>Includes growth cracks, knobs, and misshapes

<sup>3</sup>Includes hollow heart and brown center

Table 7. Effect of in-row seed spacing on yield and tuber size profile of CO94035-15RU - 2005

Seed Spacing (inches)	Total	Yield (cwt/ac)						
		< 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	> 16 oz		
10	468	46	422	394	251	143	61	29
12	489	43	446	411	455	140	71	36
14	478	43	435	399	305	156	69	35

Table 8. Effect of in-row seed spacing on tuber quality of CO94035-15RU - 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	0.9	14.2	1.090
12	0.6	9.6	1.088
14	1.2	16.7	1.094

<sup>1</sup>Includes growth cracks, knobs and misshape

<sup>2</sup>Includes hollow heart and brown center

Table 9. Effect of vine kill date on yield and tuber size profile of CO94035-15RU - 2005

Vine kill (DAP) <sup>1</sup>	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
90	323	90	233	233	223	10	0	0
100	466	87	379	379	302	77	33	0
110	520	44	477	456	292	164	82	21
120	638	54	584	566	374	192	113	18

<sup>1</sup>Days after planting

Table 10. Effect of vine kill date on tuber quality of CO94035-15RU - 2005

Vine kill (days after planting)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
90	0	1.2	1.064
100	1.7	0.5	1.071
110	1.8	4.1	1.079
120	3.6	3.3	1.093

<sup>1</sup>Includes growth cracks, knobs and misshape

<sup>2</sup>Includes hollow heart and brown center

Table 11. Effect of seed size and seed age on yield and tuber size profile of AC92009-4RU - 2005

Treatment (seed size/age)	Total	< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
				Yield (cwt/ac)				
2-2.5oz/Cold	592	59	523	499	319	181	97	24
2-2.5oz/Warm	529	41	500	452	246	205	116	48
3-3.5oz/Cold	597	55	542	520	339	180	82	22
3-3.5oz/Warm	519	47	472	447	325	122	70	25

Table 12. Effect of seed size and seed age on tuber quality of AC92009-4RU - 2005

Treatment (seed size/seed age)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
2 - 2 .5 oz/Cold	0	1.2	1.101
2 - 2. 5 oz/Warm	0.9	0	1.097
3 - 3. 5 oz/Cold	0	0	1.099
3 - 3. 5 oz/Warm	1.0	0	1.098

<sup>1</sup>Includes growth cracks, knobs and misshape

<sup>2</sup>Includes hollow heart and brown center

Table 13. Effect of in-row seed spacing on yield and tuber size distribution of CO93001-11RU - 2005

Seed spacing (inches)	Total	< 4 oz	>4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
				Yield (cwt/ac)				
10	435	69	366	366	284	82	27	0
12	349	64	284	279	211	68	17	5
14	405	55	350	344	236	108	55	6

Table 14. Effect of in-row seed spacing on tuber quality of CO93001-11RU - 2005

Seed spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	2.0	0	1.068
12	1.1	0	1.066
14	3.7	1.0	1.067

<sup>1</sup>Includes growth cracks, knobs and misshape

<sup>2</sup>Includes hollow heart and brown center

Table 15. Effect of vine kill date on yield and tuber size profile of CO93001-11RU - 2005

Vine kill (DAP) <sup>1</sup>	Total	< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
				Yield (cwt/ac)				
90	423	105	318	318	272	46	21	0
100	461	64	397	397	349	49	0	0
110	538	74	464	454	333	120	36	10
120	543	59	484	464	354	110	36	21

<sup>1</sup>Days after planting



Table 16. Effect of vine kill date on tuber quality of CO93001 -11RU – 2005

Vine kill (Days after planting)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
90	2.3	0	1.069
100	3.9	0	1.073
110	3.9	0	1.075
120	4.2	0	1.070

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center

Table 17. Effect of vine kill date on yield and tuber size profile of Klamath Russet - 2005

Vine kill (DAP) <sup>1</sup>	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
90	338	110	228	228	228	0	0	0
100	569	69	500	477	402	74	26	23
110	628	100	528	474	308	167	74	54
120	753	90	664	582	390	192	97	82

<sup>1</sup>Days after planting

Table 18. Effect of vine kill date on tuber quality of Klamath Russet - 2005

Vine kill (days after planting)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
90	0.8	0	1.069
100	3.1	2.0	1.075
110	1.1	1.5	1.085
120	2.0	5.5	1.087

<sup>1</sup>Includes growth cracks, knobs and misshape

<sup>2</sup>Includes hollow heart and brown center

Table 19. Effect of in-row seed spacing on yield and tuber size profile of Russet Norkotah (sel.8) - 2005

Seed Spacing (inches)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	> 16 oz	
10	591	27	564	500	304	196	78	64
12	579	20	559	429	196	233	132	130
14	539	31	508	432	282	150	87	76

Table 20. Effect of in-row seed spacing on tuber quality of Russet Norkotah (sel.8) - 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	0.5	3.0	1.083
12	3.9	4.1	1.080
14	1.9	1.0	1.082

<sup>1</sup> Includes growth cracks, knobs and misshape

<sup>2</sup> Includes hollow heart and brown center

Table 21. Effect of vine kill date on yield and tuber size profile of Russet Norkotah (sel.8) - 2005

Vine kill (DAP) <sup>1</sup>	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	> 16 oz	
90	379	79	300	295	256	38	5	5
100	536	54	482	477	331	146	69	5
110	587	54	533	528	343	185	105	5
120	687	44	643	564	331	233	92	79

<sup>1</sup> Days after planting

Table 22. Effect of vine kill date on tuber quality of Russet Norkotah (sel.8) - 2005

Vine Kill (days after planting)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
90	3.5	0	1.067
100	2.9	1.0	1.073
110	1.2	0	1.080
120	4.1	4.2	1.080

<sup>1</sup> Includes growth cracks, knobs and misshape

<sup>2</sup> Includes hollow heart and brown center

Table 23. Effect of nitrogen application timing on yield and tuber size profile of Colorado Rose (CO89097-2R) – 2005

Application timing <sup>1</sup>	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz > 16 oz	
Jun 16 - Jul 28	668	109	598	550	380	170	70	48
Jun 23 - Aug 4	683	131	591	580	400	180	101	12
Jun 30 – Aug 11	738	102	636	610	426	184	67	26

<sup>1</sup> A total of 140 lb N/ac was applied in four split applications. Sixty lb N/ac was applied pre-plant. The June 16, 23, and 30 applications were done 5, 6, and 7 wk after planting, respectively, and subsequent split applications were done at two weeks interval until the total rate of 140 lb N/ac was attained.

Table 24. Effect of nitrogen application timing on tuber quality of Colorado Rose (CO89097-2R) – 2005

Application timing <sup>1</sup>	% External defects <sup>2</sup>	% Internal defects <sup>3</sup>	Specific Gravity
Jun 16 - Jul 28	0.5	0	1.083
Jun 23 - Aug 4	0.6	0	1.081
Jun 30 – Aug 11	1.9	1.0	1.084

<sup>1</sup> A total of 140 lb N/ac was applied in four split applications. Sixty lb N/ac was applied pre-plant. The June 16, 23, and 30 applications were done 5, 6, and 7 wk after planting, respectively, and subsequent split applications were done at two weeks interval until the total rate of 140 lb N/ac was attained.

<sup>2</sup> Includes growth cracks, knobs, and misshapes

<sup>3</sup> Includes hollow heart and brown center

Table 25. Effect of nitrogen application timing on tuber diameter of Colorado Rose (CO89097-2R) – 2005

Application timing <sup>1</sup>	< 2 in. dia. <sup>2</sup>	2 – 4 in. dia.	> 4 in. dia.	> 2 in. dia. < 10 oz	> 2 in. dia. > 10 oz
Jun 16 - Jul 28	68	644	8	434	218
Jun 23 - Aug 4	71	657	0	464	193
Jun 30 – Aug 11	51	709	9	518	200

<sup>1</sup> A total of 140 lb N/ac was applied in four split applications. Sixty lb N/ac was applied pre-plant. The June 16, 23, and 30 applications were done 5, 6, and 7 wk after planting, respectively, and subsequent split applications were done at two weeks interval until the total rate of 140 lb N/ac was attained.

<sup>2</sup> dia. = diameter

Table 26. Effect of in-row seed spacing on yield and tuber size profile of Colorado Rose (CO89097-2R) – 2005

Seed Spacing (inches)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	> 16 oz	
10	559	139	420	415	346	69	34	5
12	604	100	504	473	340	132	70	31
14	649	92	557	545	424	121	56	11

Table 27. Effect of in-row seed spacing on tuber quality of Colorado Rose (CO89097-2R) – 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	0	0	1.083
12	0.2	0	1.088
14	1.7	0	1.089

<sup>1</sup> Includes growth cracks, knobs, and misshapes

<sup>2</sup> Includes hollow heart and brown center

Table 28. Effect of in-row seed spacing on tuber diameter of Colorado Rose (CO89097-2R) – 2005

Seed spacing (inches)	Yield (cwt/ac)			
	< 2 in. dia. <sup>1</sup>	2 – 4 in. dia.	> 4 in. dia.	> 2 in. dia. < 10 oz
10	74	483	0	410
12	62	540	0	377
14	58	589	0	458
				131

<sup>1</sup>dia. = diameter

Table 29. Effect of vine kill date on yield and tuber size profile of Colorado Rose (CO89097-2R) – 2005

Vine kill (DAP) <sup>1</sup>	Yield (cwt/ac)						
	Total	< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz
90	422	177	245	245	238	7	5
100	559	123	436	436	399	37	12
110	746	133	612	607	499	109	49
120	721	92	628	628	503	126	49

<sup>1</sup>Days after planting

Table 30. Effect of vine kill date on tuber quality of Colorado Rose (CO89097-2R) – 2005

Vine kill (DAP) <sup>1</sup>	% External defects <sup>2</sup>	% Internal defects <sup>3</sup>	Specific Gravity
90	1.7	1.7	1.064
100	1.8	0.5	1.072
110	0.6	0.7	1.085
120	0.3	0.8	1.084

<sup>1</sup> Days after planting;

<sup>2</sup> Includes growth cracks, knobs, and misshapes

<sup>3</sup> Includes hollow heart and brown center

Table 31. Effect of vine kill date on tuber diameter of Colorado Rose (CO89097-2R) – 2005

Vine kill date (DAP) <sup>1</sup>	< 2 in. dia. <sup>2</sup>	2 – 4 in. dia.	Yield (cwt/ac)		
			> 4 in. dia.	> 2in. dia.< 10 oz	> 2 in. dia.>10 oz
90	97	320	0	315	5
100	67	484	0	448	36
110	97	641	0	561	79
120	67	648	0	543	105

<sup>1</sup> Days after planting

<sup>2</sup> dia. = diameter

Table 32. Effect of in-row seed spacing on yield and tuber size profile of Durango Red (CO86218-2R) - 2005

Seed Spacing (inches)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
10	545	113	433	409	281	128	62	24
12	517	92	425	388	260	128	65	37
14	518	83	435	395	249	146	78	40

Table 33. Effect of in-row seed spacing on tuber quality of Durango Red (CO86218-2R) - 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	2.1	0	1.084
12	3.9	0	1.084
14	4.6	2.2	1.082

<sup>1</sup> Includes growth cracks, knobs and misshape

<sup>2</sup> Includes hollow heart and brown center

Table 34. Effect of in-row seed spacing on tuber diameter of Durango Red (CO86218-2R) - 2005

Seed Spacing (inches)	Yield (cwt/ac)				
	< 2 in.	2 - 4 in.	> 4 in.	> 2 in. < 10 oz	> 2in. > 10 oz
10	53	485	5	343	148
12	43	461	14	310	166
14	43	477	0	293	184



Table 35. Effect of vine kill date on yield and tuber size profile of Durango Red (CO86218-2R) - 2005

Vine kill (DAP) <sup>1</sup>	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
90	400	167	233	233	215	18	0	0
100	472	154	318	292	238	54	28	26
110	579	156	423	423	325	97	67	0
120	554	100	454	420	328	92	28	33

<sup>1</sup> Days after planting

Table 36. Effect of vine kill date on tuber quality of Durango Red (CO86218-2R) - 2005

Vine kill (days after planting)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
90	3.3	0	1.063
100	7.0	0	1.071
110	2.6	0	1.077
120	5.1	0	1.083

<sup>1</sup> Includes growth cracks, knobs and misshape

<sup>2</sup> Includes hollow heart and brown center

Table 37. Effect of vine kill date on tuber diameter of Durango Red (CO86218-2R) - 2005

Vine kill (DAP) <sup>1</sup>	Yield (cwt/ac)				
	< 2 in.	2 - 4 in.	> 4 in.	> 2 in. < 10 oz	> 2 in. > 10 oz
90	77	318	0	300	18
100	67	407	5	331	85
110	74	482	0	407	74
120	41	507	15	387	128

<sup>1</sup> Days after planting

Table 38. Effect of nitrogen rate and seed spacing on yield and tuber size distribution of NDC5281-2R - 2005

Seed spacing / Nitrogen Rate (in./lbs per ac)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	>16 oz
10" 0N	406	181	225	225	217	8	0	0
10" 60N	607	249	358	358	352	6	0	0
10" 120N	644	315	330	330	317	13	0	0
10" 180N	577	240	337	337	299	37	24	0
10" 240N	595	304	291	291	279	11	5	0
12" 0N	501	193	309	303	281	22	4	6
12" 60N	674	307	368	368	355	13	0	0
12" 120N	599	254	345	345	313	32	8	0
12" 180N	688	300	388	388	363	25	5	0
12" 240N	574	246	328	328	310	18	4	0
14" 0N	413	188	225	225	222	3	0	0
14" 60N	523	245	278	278	267	11	5	0
14" 120N	530	230	300	300	294	7	4	0
14" 180N	548	238	310	310	303	7	0	0
14" 240N	536	242	294	294	280	13	0	0

Table 39. Effect of nitrogen rate and seed spacing on tuber quality of NDC5281-2R - 2005

Seed spacing / Nitrogen rate (inches/ lbs per acre)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10" 0N	0	0	1.080
10" 60N	0.7	0	1.082
10" 120N	0.1	0	1.076
10" 180N	0.2	0	1.081
10" 240N	0	0	1.079
12" 0N	1.9	0	1.080
12" 60N	2.3	0.6	1.082
12" 120N	0.7	0	1.082
12" 180N	0.7	0	1.078
12" 240N	1.5	0	1.081
14" 0N	0.2	0	1.083
14" 60N	2.9	0.7	1.081
14" 120N	0.7	0	1.077
14" 180N	0.8	0	1.080
14" 240N	0	0	1.080

<sup>1</sup> Includes growth cracks, knobs and misshape

<sup>2</sup> Includes hollow heart and brown center

Table 40. Effect of nitrogen rate and seed spacing on tuber diameter of NDC5281-2R - 2005

Seed spacing/Nitrogen rate (inches/lbs per acre)	Seed spacing (inches)			Yield (cwt/ac)		
	< 2 in. dia. <sup>1</sup>	2 - 4 in. dia.	> 4 in. dia.	> 2 in. dia. < 10 oz	> 2 in. dia. > 10 oz	
10" 0N	92	311	0	311	0	
10" 60N	137	470	0	463	7	
10" 120N	173	474	0	461	13	
10" 180N	129	448	0	429	19	
10" 240N	175	417	0	405	11	
12" 0N	105	403	0	376	28	
12" 60N	182	494	0	480	14	
12" 120N	141	459	0	427	32	
12" 180N	173	516	0	494	22	
12" 240N	149	416	0	397	19	
14" 0N	97	318	0	318	0	
14" 60N	139	385	0	374	11	
14" 120N	134	401	0	394	7	
14" 180N	155	392	0	385	7	
14" 240N	146	390	0	381	9	

<sup>1</sup> dia = diameter

Table 41. Effect of seed spacing averaged across nitrogen rates on yield and tuber size distribution of NDC5281-2R - 2005

Seed Spacing (inches)	Total	< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz	Yield (cwt/ac)		
									10	12	14
10	566	258	308	308	293	15	6	0			
12	607	260	348	346	324	22	4	1			
14	510	229	281	281	273	8	2	0			

Table 42. Effect of seed spacing averaged across nitrogen rates on tuber quality of NDC5281-2R - 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
12	1.4	0.1	1.081
14	0.9	0.1	1.080

<sup>1</sup>Includes growth cracks, knobs and misshape

<sup>2</sup>Includes hollow heart and brown center

Table 43. Effect of seed spacing averaged across nitrogen rates on tuber diameter of NDC5281-2R - 2005

Seed Spacing (inches)	< 2 in.dia <sup>1</sup>	2 - 4 in. dia.	> 4 in.dia.	> 2 in.dia.< 10 oz	> 2 in.dia. > 10 oz
10	141	424	0	414	10
12	150	458	0	435	23
14	134	377	0	371	6

<sup>1</sup>dia = diameter

Table 44. Effect of nitrogen rate averaged across in-row seed spacing on yield and tuber size distribution of NDC5281-2R - 2005

Nitrogen Rate (lbs/ac)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
0	440	187	253	251	240	11	1	2
60	601	267	335	335	325	10	2	0
120	591	266	325	325	308	17	4	0
180	604	259	345	345	322	23	10	0
240	568	264	304	304	290	14	3	0

Table 45. Effect of nitrogen rate averaged across in-row seed spacing on tuber quality of NDC5281-2R - 2005

Nitrogen Rate (lbs/ac)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
0	0.7	0	1.081
60	2.0	0.4	1.082
120	0.5	0	1.078
180	0.6	0	1.080
240	0.5	0	1.080

<sup>1</sup>Includes growth cracks, knobs and misshape

<sup>2</sup>Includes hollow heart and brown center

Table 46. Effect of nitrogen rate averaged across in-row seed spacing on tuber diameter of NDC5281-2R - 2005

Nitrogen (lb/ac)	Yield (cwt/ac)		
	< 2 in.dia <sup>1</sup>	2 - 4 in. dia.	> 2 in.dia.< 10 oz > 2 in.dia. > 10 oz
0	98	344	335
60	153	450	439
120	149	445	427
180	152	452	436
240	157	408	395

<sup>1</sup>dia = diameter

Table 47. Effect of nitrogen rate and seed spacing on yield and tuber size distribution of Sangre - 2005

Seed spacing / Nitrogen Rate (in./lbs per ac)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
10" 0N	620	97	523	513	356	156	69	10
10" 60N	769	100	669	648	413	236	138	21
10" 120N	728	113	615	551	374	177	103	64
10" 180N	756	133	623	605	423	182	87	18
10" 240N	712	100	612	523	290	233	118	90
12" 0N	710	105	605	561	351	210	92	44
12" 60N	725	126	600	561	392	169	79	38
12" 120N	776	120	656	587	395	192	110	69
12" 180N	677	120	556	513	328	185	87	44
12" 240N	774	131	643	592	372	220	108	51
14" 0N	653	95	559	515	336	179	92	44
14" 60N	753	103	651	610	374	236	126	41
14" 120N	738	123	615	538	351	187	85	77
14" 180N	715	115	600	543	354	190	103	56
14" 240N	743	110	633	567	354	213	140	66



Table 48. Effect of nitrogen rate and seed spacing on tuber quality of Sangre - 2005

Seed spacing / Nitrogen rate (inches/ lbs per acre)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10" 0N	1.9	2.6	1.089
10" 60N	2.4	3.2	1.084
10" 120N	0.7	3.7	1.081
10" 180N	2.2	1.8	1.075
10" 240N	7.4	4.4	1.075
12" 0N	1.1	1.4	1.086
12" 60N	1.5	0.7	1.086
12" 120N	4.1	1.9	1.082
12" 180N	1.5	2.7	1.083
12" 240N	2.0	0.7	1.078
14" 0N	4.1	2.7	1.084
14" 60N	4.1	3.8	1.081
14" 120N	5.8	2.7	1.078
14" 180N	4.9	0.9	1.080
14" 240N	3.3	3.8	1.076

<sup>1</sup> Includes growth cracks, knobs and misshape

<sup>2</sup> Includes hollow heart and brown center

Table 49. Effect of nitrogen rate and seed spacing on tuber diameter of Sangre - 2005

Seed spacing/Nitrogen rate (inches/lbs per acre)	< 2 in. dia <sup>1</sup>	2 - 4 in. dia.	Yield (cwt/ac)		
			> 4 in. dia.	> 2 in. dia. < 10 oz	> 2 in. dia. > 10 oz
10" 0N	44	577	0	405	172
10" 60N	54	725	0	469	256
10" 120N	56	661	18	436	243
10" 180N	62	700	0	492	208
10" 240N	44	648	23	356	315
12" 0N	56	646	8	405	249
12" 60N	67	671	0	446	226
12" 120N	59	715	26	469	272
12" 180N	64	620	0	395	226
12" 240N	67	705	0	431	274
14" 0N	41	620	8	402	226
14" 60N	51	692	8	420	279
14" 120N	54	679	8	425	261
14" 180N	56	666	0	415	251
14" 240N	72	666	5	395	277

<sup>1</sup> dia = diameter

Table 50. Effect of seed spacing averaged across nitrogen rates on yield and tuber size distribution of Sangre - 2005

Seed Spacing (inches)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	> 16 oz	
10	717	109	608	568	371	197	103	41
12	732	120	612	563	368	195	95	49
14	720	109	612	555	354	201	109	57

Table 51. Effect of seed spacing averaged across nitrogen rates on tuber quality of Sangre - 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	2.9	3.1	1.081
12	2.0	1.5	1.083
14	4.0	2.8	1.080

<sup>1</sup>Includes growth cracks, knobs and misshape

<sup>2</sup>Includes hollow heart and brown center

Table 52. Effect of seed spacing averaged across nitrogen rates on tuber diameter of Sangre - 2005

Seed Spacing (inches)	Yield (cwt/ac)		
	< 2 in.dia <sup>1</sup>	2 - 4 in. dia.	> 4 in.dia. > 2 in.dia.< 10 oz > 2 in.dia. > 10 oz
10	52	662	432
12	63	671	429
14	55	665	411

<sup>1</sup>dia = diameter

Table 53. Effect of nitrogen rate averaged across in-row seed spacing on yield and tuber size distribution of Sangre - 2005

Nitrogen Rate (lbs/ac)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
0	661	99	562	530	348	182	84	33
60	749	110	640	606	393	214	114	33
120	747	119	629	559	373	185	99	70
180	716	123	593	554	368	186	92	39
240	743	114	629	561	339	222	122	69

Table 54. Effect of nitrogen rate averaged across in-row seed spacing on tuber quality of Sangre - 2005

Nitrogen Rate lbs/ac)	% External defects <sup>1</sup>		% Internal defects <sup>2</sup>		Specific Gravity
	0	60	120	180	
0	2.4	2.7	2.2	2.7	1.086
60	2.7	3.5	2.7	2.8	1.084
120	3.5	2.9	2.8	1.8	1.080
180	2.9	4.2	1.8	3.0	1.079
240	4.2		3.0		1.076

<sup>1</sup>Includes growth cracks, knobs and misshape

<sup>2</sup>Includes hollow heart and brown center

Table 55. Effect of nitrogen rate averaged across in-row seed spacing on tuber diameter of Sangre - 2005

Nitrogen rate (lbs/ac)	< 2 in.dia <sup>1</sup>		2 - 4 in. dia.		> 4 in.dia.		> 2 in.dia.< 10 oz		> 2.in.dia. > 10 oz	
	Yield (cwt/ac)									
0	47	613	5	404	216					
60	57	696	3	445	254					
120	56	685	17	443	259					
180	61	662	0	434	228					
240	61	673	9	394	289					

<sup>1</sup> dia = diameter

Table 56. Effect of nitrogen rate and seed spacing on yield and tuber size distribution of Purple Majesty (CO94165-3P/P) – 2005

Seed spacing/ Nitrogen Rate (in./lbs per ac)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz	> 16 oz
10" 0N	454	319	135	135	133	2	0	0
10" 60N	556	326	229	229	227	2	0	0
10" 120N	567	371	196	196	184	12	0	0
10" 180N	595	358	237	237	206	31	14	0
10" 240N	463	301	161	161	154	7	5	0
12" 0N	404	242	163	163	155	8	5	0
12" 60N	500	331	169	169	169	0	0	0
12" 120N	592	389	200	200	190	10	0	0
12" 180N	540	315	224	224	196	28	9	0
12" 240N	581	378	202	202	194	8	0	0
14" 0N	446	290	156	156	151	5	0	0
14" 60N	524	356	169	169	165	4	0	0
14" 120N	455	277	178	178	171	7	5	0
14" 180N	551	343	209	209	193	8	0	8
14" 240N	495	269	226	226	200	26	10	0

Table 57. Effect of nitrogen rate and seed spacing on tuber quality of Purple Majesty (CO94165-3P/P) – 2005

Seed spacing/Nitrogen rate (inches/lbs per acre)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10" 0N	0	1.7	1.081
10" 60N	0	1.8	1.082
10" 120N	0	0.4	1.077
10" 180N	0	1.3	1.080
10" 240N	1.4	0	1.077
12" 0N	0.6	0	1.082
12" 60N	0	0.3	1.082
12" 120N	0.2	0.4	1.078
12" 180N	0.5	1.1	1.078
12" 240N	0.2	0	1.076
14" 0N	0	1.0	1.085
14" 60N	0.5	1.0	1.085
14" 120N	0	0.9	1.082
14" 180N	0.6	2.2	1.081
14" 240N	1.2	3.2	1.080

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center

Table 58. Effect of seed spacing averaged across nitrogen rates on yield and tuber size distribution of Purple Majesty (CO94165) – 2005

Seed Spacing (inches)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz	> 16 oz
10	527	335	192	192	181	11	4	0
12	523	331	192	192	181	11	3	0
14	494	307	188	186	176	10	3	2

Table 59. Effect of seed spacing averaged across nitrogen rates on tuber quality of Purple Majesty (CO94165) – 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	0.3	1	1.079
12	0.3	0.4	1.079
14	0.5	1.7	1.083

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center



Table 60. Effect of nitrogen rate averaged across in-row seed spacing on yield and tuber size distribution of Purple Majesty (CO94165) – 2005

Nitrogen Rate (lbs/ac)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	> 16 oz	
0	435	284	151	151	146	5	2	0
60	527	338	189	189	187	2	0	0
120	538	346	191	191	182	9	2	0
180	562	339	223	221	198	23	8	3
240	513	316	196	196	183	13	5	0

Table 61. Effect of nitrogen rate averaged across in-row seed spacing on tuber quality of Purple Majesty (CO94165) – 2005

Nitrogen Rate (lbs/ac)	% External defects <sup>1</sup>		% Internal defects <sup>2</sup>		Specific Gravity
	% External defects <sup>1</sup>	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	% Internal defects <sup>2</sup>	
0	0.2	0.2	0.9	0.9	1.083
60	0.2	0.2	1.0	1.0	1.083
120	0.1	0.1	0.6	0.6	1.079
180	0.4	0.4	1.5	1.5	1.080
240	0.9	0.9	1.1	1.1	1.078

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center

Table 62. Effect of nitrogen rate and seed spacing on yield and tuber size distribution of Mountain Rose (CO94183-1R/R) – 2005

Seed spacing/ Nitrogen Rate (in./lbs per ac)	Total	Yield (cwt/ac)					
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz
10" 0N	345	149	196	196	0	0	0
10" 60N	484	136	348	348	23	8	0
10" 120N	499	142	357	329	28	9	0
10" 180N	461	139	327	279	43	5	5
10" 240N	489	157	333	329	4	0	0
12" 0N	402	149	253	241	11	0	0
12" 60N	495	130	365	346	18	0	0
12" 120N	437	122	315	280	35	9	0
12" 180N	440	120	319	299	15	0	5
12" 240N	386	130	257	243	13	4	0
14" 0N	373	128	246	240	5	0	0
14" 60N	355	89	266	241	25	12	0
14" 120N	396	113	283	259	24	0	0
14" 180N	462	128	335	300	34	8	0
14" 240N	366	106	260	242	18	0	0

Table 63. Effect of nitrogen rate and seed spacing on tuber quality of Mountain Rose (CO94183-1R/R) – 2005

Seed spacing/Nitrogen rate (inches/lbs per acre)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10" 0N	0	0	1.077
10" 60N	0.8	0	1.078
10" 120N	0.7	0	1.074
10" 180N	0	0	1.072
10" 240N	1.1	0	1.074
12" 0N	0.6	0	1.075
12" 60N	0.6	0	1.074
12" 120N	0	0	1.073
12" 180N	0.1	0	1.072
12" 240N	0	0	1.073
14" 0N	0	0	1.076
14" 60N	0	0	1.074
14" 120N	0.2	0	1.074
14" 180N	0.2	0	1.075
14" 240N	0	0	1.073

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center



Table 65. Effect of seed spacing averaged across nitrogen rates on yield and tuber size distribution of Mountain Rose (CO94183-1R/R) – 2005

Seed Spacing (inches)	Total	Yield (cwt/ac)					
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	> 16 oz
10	456	145	312	311	292	20	4
12	432	130	302	301	282	18	3
14	390	113	278	278	256	21	4

Table 66. Effect of seed spacing averaged across nitrogen rates on tuber quality of Mountain Rose (CO94183-1R/R) – 2005

Seed Spacing (inches)	% External defects <sup>1</sup>		% Internal defects <sup>2</sup>		Specific Gravity
	2 – 4 in. dia.	> 4 in. dia.	> 2 in. dia. < 10oz	> 2 in. dia. > 10oz	
10	0.5	0	1.075		
12	0.3	0	1.074		
14	0.1	0	1.074		

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center

Table 67. Effect of seed spacing averaged across nitrogen rates on tuber diameter of Mountain Rose (CO94183-1R/R) – 2005

Seed Spacing (inches)	diameter		
	< 2 in. dia. <sup>1</sup>	2 – 4 in. dia.	> 4 in. dia. > 2 in. dia. > 10oz
10	62	392	373
12	61	372	351
14	54	334	315

Table 68. Effect of nitrogen rate averaged across in-row seed spacing on yield and tuber size distribution of Mountain Rose (CO94183-1R/R) – 2005

Nitrogen Rate (lbs/ac)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz	> 16 oz
0	373	142	232	232	226	5	0	0
60	445	118	326	326	304	22	7	0
120	444	126	318	318	289	29	6	0
180	454	129	327	324	293	31	4	3
240	414	131	283	283	271	12	1	0

Table 69. Effect of nitrogen rate averaged across in-row seed spacing on tuber quality of Mountain Rose (CO94183-1R/R) – 2005

Nitrogen Rate (lbs/ac)	% External defects <sup>1</sup>		% Internal defects <sup>2</sup>		Specific Gravity
0		0.2		0	1.076
60		0.5		0	1.075
120		0.3		0	1.074
180		0.1		0	1.073
240		0.4		0	1.073

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center

Table 70. Effect of nitrogen rate averaged across in-row seed piece spacing on tuber diameter of Mountain Rose (CO94183-1R/R) – 2005

Nitrogen rate (lb/ac)	< 2 in. dia. <sup>1</sup>	2 – 4 in. dia.	> 4 in. dia.	> 2 in. dia. < 10oz	> 2 in. dia. > 10oz
0	67	303	0	297	5
60	57	391	0	369	24
120	62	381	3	354	28
180	63	391	0	356	36
240	44	363	1	356	7

<sup>1</sup> diameter

Table 71. Effect of nitrogen rate and seed spacing on yield and tuber size distribution of All Blue – 2005

Seed spacing/ Nitrogen Rate (in./lbs per ac)	Total	Yield (cwt/ac)						> 16 oz
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz	
10" 0N	453	185	268	268	248	20	0	0
10" 60N	522	203	324	319	277	43	14	5
10" 120N	526	182	344	344	277	67	24	0
10" 180N	588	262	325	320	253	68	30	5
10" 240N	645	261	384	384	332	52	26	0
12" 0N	533	197	336	336	302	34	12	0
12" 60N	639	243	395	387	346	42	17	8
12" 120N	492	205	287	287	245	42	12	0
12" 180N	535	209	325	320	245	76	47	5
12" 240N	548	256	292	292	243	48	23	0
14" 0N	548	308	246	241	228	13	5	5
14" 60N	543	310	233	233	213	20	5	0
14" 120N	544	252	292	292	256	36	9	0
14" 180N	541	234	308	295	260	34	14	13
14" 240N	475	226	250	245	216	28	9	5



Table 72. Effect of nitrogen rate and seed spacing on tuber quality of All Blue – 2005

Seed spacing/Nitrogen rate (inches/lbs per acre)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10" 0N	1.7	0.6	1.094
10" 60N	2.5	0	1.092
10" 120N	0.7	0.5	1.086
10" 180N	3.1	0	1.085
10" 240N	1.2	0.5	1.086
12" 0N	1.8	0	1.090
12" 60N	2.2	0	1.095
12" 120N	1.5	0	1.084
12" 180N	0.7	0	1.084
12" 240N	1.0	0	1.083
14" 0N	1.6	1.2	1.091
14" 60N	0	0	1.089
14" 120N	1.1	0	1.087
14" 180N	1.7	0	1.084
14" 240N	0	0	1.083

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center

Table 73. Effect of seed spacing averaged across nitrogen rates on yield and tuber size distribution of All Blue – 2005

Seed Spacing (inches)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz	> 16 oz
10	547	219	329	327	277	50	19	2
12	549	222	327	324	276	48	22	3
14	530	266	266	261	235	26	8	5

Table 74. Effect of seed spacing averaged across nitrogen rates on tuber quality of All Blue – 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	1.8	0.3	1.089
12	1.4	0	1.087
14	0.9	0.2	1.087

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center

Table 75. Effect of nitrogen rate averaged across in-row seed spacing on yield and tuber size distribution of All Blue – 2005

Nitrogen Rate (lbs/ac)	Total	Yield (cwt/ac)						
		< 4 oz	> 4 oz	4 – 16 oz	4 – 10 oz	10 – 16 oz	12 – 16 oz	> 16 oz
0	511	230	283	282	259	22	6	2
60	568	252	317	313	279	35	12	4
120	521	213	308	308	259	48	15	0
180	555	235	319	312	253	59	30	8
240	556	248	309	307	264	43	19	2

Table 76. Effect of nitrogen rate averaged across in-row seed spacing on tuber quality of All Blue – 2005

Nitrogen Rate (lbs/ac)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
0	1.7	0.6	1.092
60	1.6	0	1.092
120	1.1	0.2	1.086
180	1.8	0	1.084
240	0.7	0.2	1.084

<sup>1</sup>Includes growth cracks, knobs, and misshapes

<sup>2</sup>Includes hollow heart and brown center

Table 77. Effect of in-row seed spacing on yield and tuber size profile of VC0967-2R/Y - 2005

Seed Spacing (inches)	Total	Yield (cwt/ac)					
		< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	> 16 oz
10	567	89	478	478	425	53	17
12	521	98	421	421	337	84	29
14	544	71	473	473	392	81	22

Table 78. Effect of in-row seed spacing on tuber quality of VC0967-2R/Y - 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	2.2	0	1.077
12	2.3	0	1.075
14	0.7	0	1.072

<sup>1</sup> Includes growth cracks, knobs and misshape

<sup>2</sup> Includes hollow heart and brown center

Table 79. Effect of in-row seed spacing on tuber diameter of VC0967-2R/Y - 2005

Seed Spacing (inches)	Yield (cwt/ac)		
	< 2 in.	2 - 4 in.	> 2 in. < 10 oz > 2 in. > 10 oz
10	36	530	475
12	40	474	398
14	35	503	424

Table 80. Effect of vine kill date on yield and tuber size profile of VC0967- 2R/Y - 2005

Vine kill (DAP) <sup>1</sup>	Yield (cwt/ac)							
	Total	< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
90	384	136	249	249	231	18	5	0
100	402	110	292	292	284	8	5	0
110	520	110	410	410	374	36	13	0
120	484	92	392	384	325	59	26	8
Days after planting								

Table 81. Effect of vine kill date on tuber quality of VC0967 -2R/Y - 2005

Vine kill (days after planting)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
90	0	0	1.066
100	0	0	1.068
110	1.5	0	1.072
120	2.1	0	1.071

<sup>1</sup> Includes growth cracks, knobs and misshape

<sup>2</sup> Includes hollow heart and brown center

Table 82. Effect of vine kill date on tuber diameter of VC0967- 2R/Y - 2005

Vine kill (DAP) <sup>1</sup>	Yield (cwt/ac)				
	< 2 in.	2 - 4 in.	> 4 in.	> 2 in. < 10 oz	> 2 in. > 10 oz
90	67	325	0	313	13
100	46	356	0	349	8
110	46	472	5	438	38
120	54	441	0	369	72

<sup>1</sup> Days after planting

Table 83. Effect of in-row seed spacing on yield and tuber size profile of VC1002-3W/Y - 2005

Seed Spacing (inches)	Total	Yield(cwt/ac)					
		< 4 oz	> 4 oz	4 - 16 oz	10 -16 oz	12 - 16 oz	> 16 oz
10	408	274	135	135	0	0	0
12	445	268	177	177	0	0	0
14	445	264	180	180	0	0	0

Table 84. Effect of in-row seed spacing on tuber quality of VC1002-3W/Y - 2005

Seed Spacing (inches)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
10	0	0	1.096
12	2.2	0	1.099
14	0	0.5	1.099

<sup>1</sup> Includes growth cracks, knobs and misshape

<sup>2</sup> Includes hollow heart and brown center

Table 85. Effect of vine kill date on yield and tuber size profile of VC1002-3W/Y - 2005

Vine kill (DAP) <sup>1</sup>	Yield(cwt/ac)							
	Total	< 4 oz	> 4 oz	4 - 16 oz	4 - 10 oz	10 - 16 oz	12 - 16 oz	> 16 oz
90	308	256	51	51	51	0	0	0
100	400	305	95	95	95	0	0	0
110	510	300	210	210	200	10	5	0
120	551	251	300	300	287	13	8	0

<sup>1</sup> Days after planting

Table 86. Effect of vine kill date on tuber quality of VC1002-3W/Y - 2005

Vine kill (days after planting)	% External defects <sup>1</sup>	% Internal defects <sup>2</sup>	Specific Gravity
90	1.0	0	1.075
100	0	0	1.081
110	2.8	0	1.098
120	0.5	0	1.097

<sup>1</sup> Includes growth cracks, knobs and misshape

<sup>2</sup> Includes hollow heart and brown center